Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Canceled)

Claim 2 (Previously presented): The method of claim 30, wherein the method is performed for diagnosis of pulmonary hypertension within a patient.

Claim 3 (Currently amended): The method of claim 30, ~~system of claim 1~~ wherein said pressure sensor is a ~~sensing device comprises of at least one~~ capacitive sensor.

Claim 4 (Currently amended): The method of claim 30, ~~system of claim 1~~ wherein said sensing device further comprises a battery.

Claim 5 (Currently amended): The method ~~system~~ of claim 4 further comprising wireless means for recharging said battery.

Claims 6 and 7 (Canceled)

Claim 8 (Currently amended): The method of claim 30, ~~system of claim 7~~ wherein said method ~~system~~ further comprises ~~means for~~ calculating changes in said pulmonary artery pressure over time, dp/dt.

Claim 9 (Currently amended): The method of claim 30, further comprising ~~system of claim 1 wherein said sensing device comprises at least one of resonant, passive, and active means for~~ telecommunicating and/or telepowering said sensing device with a readout device that is not adapted to be implanted in the patient. ~~with said readout device.~~

Claims 10 through 16 (Canceled)

Claim 17 (Previously presented): The method of claim 30, further comprising the step of placing said sensor package in said pulmonary artery

using a surgical technique.

Claim 18 (Previously presented): The method of claim 30, further comprising the step of placing said sensor package using a minimally invasive outpatient technique.

Claim 19 (Previously presented): The method of claim 30, further comprising the step of placing said sensor package using a catheter delivery technique.

Claim 20 (Currently amended): The method of claim 30, ~~system of claim 1,~~ wherein said sensor package further comprises an anchoring mechanism.

Claim 21 (Currently amended): The method of claim 30, ~~system of claim 20~~ wherein said sensor package is anchored to the second pulmonary artery by the ~~anchoring mechanism comprises a~~ diameter of said sensor package. ~~package~~

Claims 22-29 (Canceled)

Claim 30 (Currently amended): A method of delivering a hermetic sensor package to monitor pulmonary artery pressure within a patient, said sensor package having a diameter and being adapted to be implanted into and configured to block a pulmonary artery of the patient, said sensor package containing at least one sensing device, said sensing device comprising at least one pressure sensor, the method comprising: ~~said sensor package of claim 1 comprising the step of~~

injecting said sensor package so as to deliver said sensor package into a first pulmonary artery, wherein blood flow through the first pulmonary artery delivers ~~and anchors~~ said sensor package into a second pulmonary artery with a smaller diameter than said first pulmonary artery, the second pulmonary artery being sufficiently small to prevent further movement of said sensor package and anchor said sensor package therein;

blocking the second pulmonary artery with said sensor package; and

operating said sensor package to chronically monitor pulmonary artery pressure with said sensor while the blocked second pulmonary artery remains blocked by said sensor package.

Claim 31 (Previously presented): The method of claim 30 further comprising cell growth and encapsulation of said sensor package to stabilize said sensor package.

Claim 32 (Currently amended): The method of claim 30, ~~system of claim 1~~ wherein at least a portion of said sensor package is coated with one or more layers of coatings.

Claim 33 (Currently amended): The method ~~system~~ of claim 32 wherein said one or more layers of coatings are formed from at least coating material chosen from the group consisting of silicone, hydrogels, parylene, polymer, nitrides, oxides, nitric-oxide generating materials, carbides, silicides, titanium, and combinations thereof.